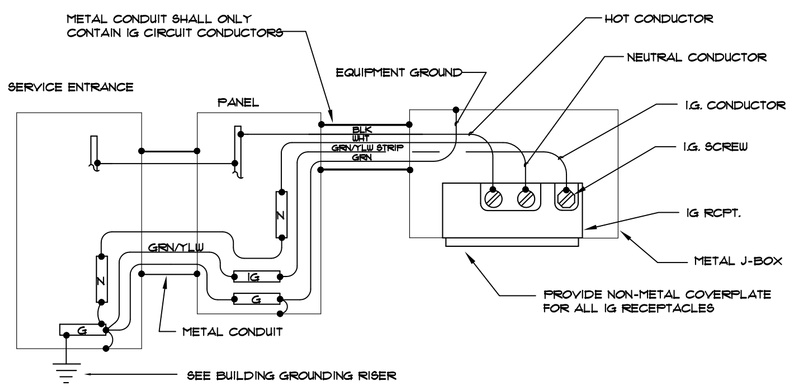
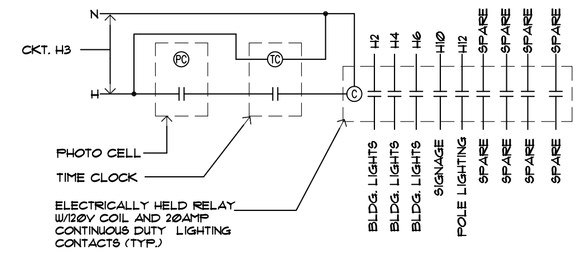


NOTES

1. EACH IG CIRCUIT SHALL HAVE MAX. OF (6) WORK STATION RECEPTACLES.
2. ISOLATED GROUND INSTALLATION SHALL COMPLY WITH
3. EACH CIRCUIT SHALL HAVE IT'S OWN ISOLATED NEC 250-146(d).
4. ENTIRE GROUNDING SYSTEM SHALL COMPLY WITH NEC EQUIPMENT GROUNDING CONDUCTOR.
5. CONDUCTORS FROM DEVICES IF RUN SEPERATELY, MAY ARRIVE AT BREAKER TERMINAL IN PANEL.
6. USE MINIMUM #10 AWG FOR ALL IG CIRCUIT WIRING UNDER 200 FEET. USE #8 AWG FOR OVER 200 FEET.

02 IG RECEPTACLE DETAIL

NO SCALE



03 EXTERIOR LIGHTING CONTROL DIAGRAM

NO SCALE

LEASE SPACE LOAD ANALYSIS	2000 SQ. FT.
LIGHTING @ 3.5 VA /SQ FT. =	7000 VA
SIGNAGE @ 125%=	1500 VA
RECEPTACLES=	2000 VA
MISCELLANEOUS @ 100%=	4000 VA
HVAC EQUIPMENT@100%=	16920 VA
WATER HEATER @ 100%=	4500 VA
LARGEST LOAD @ 25%=	2010 VA
TOTAL DEMAND LOAD =	37930 VA
TOTAL AMPS =	106 AMPS

MEDICAL OFFICE LOAD ANALYSIS	
LIGHTS AND SIGNAGE @ 125%=	9181 VA
RECEPTACLES (24.46) @ 50% AFTER 10KW=	11730 VA
HVAC EQUIPMENT@100%=	55728 VA
MISCELLANEOUS @ 100%	4560 VA
WATER HEATER @ 100%=	6000 VA
LARGEST MOTOR LOAD @ 25%=	1150 VA
TOTAL DEMAND LOAD =	93849 VA
TOTAL AMPS =	262 AMPS

TOTAL BUILDING LOAD ANALYSIS	
TOTAL LEASE SPACE DEMAND LOAD =	37930 VA
TOTAL MEDICAL OFFICE DEMAND LOAD =	93849 VA
TOTAL HOUSE PANEL DEMAND LOAD =	10325 VA
TOTAL BUILDING DEMAND LOAD=	142104 VA 395 AMPS

PANEL "A" SCHEDULE

120/208V, 3P/400 AMP 42 SPACE
RECESSED PANEL W/400 AMP MAIN LUGS ONLY. 22 KAIC

NOTES:	DESCRIPTION	POLE	TRIP AMPS	TOTAL WATTS	ABC		TOTAL WATTS	TRIP AMPS	POLE	DESCRIPTION	NOTES:
	AHU 1	3	30	2106	1	2	2256	30	3	HPU 1	2
	↓	↓	↓	2106	3	4	2256	↓	↓	↓	
				2106	5	6	2256				
	AHU 2	3	30	2106	7	8	2256	30	3	HPU 2	2
	↓	↓	↓	2106	9	10	2256	↓	↓	↓	
				2106	11	12	2256				
	AHU 3	3	30	2106	13	14	2820	40	3	HPU 3	2
	↓	↓	↓	2106	15	16	2820	↓	↓	↓	
				2106	17	18	2820				
	AHU 4	3	30	2106	19	20	2820	40	3	HPU 4	2
	↓	↓	↓	2106	21	22	2820	↓	↓	↓	
				2106	23	24	2820				
1	WATER HEATER	3	30	2000	25	26	965	20	1	LOBBY LIGHTS	1
	↓	↓	↓	2000	27	28	785	20	1	TREATMENT ROOM LIGHTS	1
				2000	29	30	1035	20	1	TREATMENT ROOM LIGHTS	1
	PANEL 'B'	3	100	9720	31	32	1375	20	1	TREATMENT ROOM LIGHTS	1
	↓	↓	↓	9820	33	34	1340	20	1	CORRIDOR LIGHTS	1
				9480	35	36	1040	20	1	CENTRAL LIGHTS	1
	SPARE	1	20		37	38	805	20	1	CENTRAL LIGHTS	1
	SPARE	1	20		39	40		20	1	SPARE	
	SPARE	1	20		41	42		20	1	SPARE	

TOTAL 'A' 33441
TOTAL 'B' 32521
TOTAL 'C' 32131
PANEL TOTAL: 98093W (272 AMPS)

1. PROVIDE LOCK ON BREAKER
2. PROVIDE HACR TYPE CIRCUIT BREAKER
3. CIRCUIT THROUGH TIME CLOCK.

PANEL "B" SCHEDULE

120/208V, 3P/200 AMP 42 SPACE
RECESSED PANEL W/200 AMP MAIN LUGS ONLY. 22 KAIC

NOTES:	DESCRIPTION	POLE	TRIP AMPS	TOTAL WATTS	ABC		TOTAL WATTS	TRIP AMPS	POLE	DESCRIPTION	NOTES:
	AHU RECPT/ LTS	1	20	1020	1	2	720	20	1	RECEPTACLES	
	RECEPTACLES / RECIRC PUMP	1	20	940	3	4	1080	20	1	RECEPTACLES	
	RECEPTACLES	1	20	720	5	6	600	20	1	REFRIGERATOR	
	RECEPTACLES	1	20	1260	7	8	600	20	1	REFRIGERATOR	
	RECEPTACLES	1	20	1260	9	10	600	20	1	REFRIGERATOR	
	RECEPTACLES	1	20	1440	11	12	720	20	1	RECEPTACLES	
	RECEPTACLES	1	20	720	13	14	1080	20	1	RECEPTACLES	
	RECEPTACLES	1	20	1260	15	16	360	20	1	RECEPTACLES	
	MICROWAVE	1	20	1500	17	18	720	20	1	RECEPTACLES	
	REFRIGERATOR / ICE MAKER	1	20	900	19	20	900	20	1	RECEPTACLES	
	RECEPTACLES	1	20	1440	21	22	1500	20	1	PRINTER (1)	
	RECEPTACLES	1	20	1080	23	24				SPACE	
	RECEPTACLES	1	20	1080	25	26	1260	20	1	RECEPTACLES	
	RECEPTACLES	1	20	900	27	28		20	1	SPARE	
	RECEPTACLES	1	20	720	29	30		20	1	SPARE	
	RECEPTACLES	1	20	1440	31	32		20	1	SPARE	
	RECEPTACLES	1	20	540	33	34		20	1	SPARE	
	ELEC RM DED RCPT.	1	20	360	35	36		20	1	SPARE	
	DISHWASHER (1)	1	20	1200	37	38		20	1	SPARE	
	RECEPTACLES	1	20	1440	39	40				SPACE	
	TELEPHONE / SECURITY	1	20	360	41	42				SPACE	

TOTAL 'A' 9720
TOTAL 'B' 9820
TOTAL 'C' 9480
PANEL TOTAL: 29020W (81 AMPS)

1. PROVIDE LOCK ON BREAKER
2. PROVIDE HACR TYPE CIRCUIT BREAKER
3. CIRCUIT THROUGH TIME CLOCK.

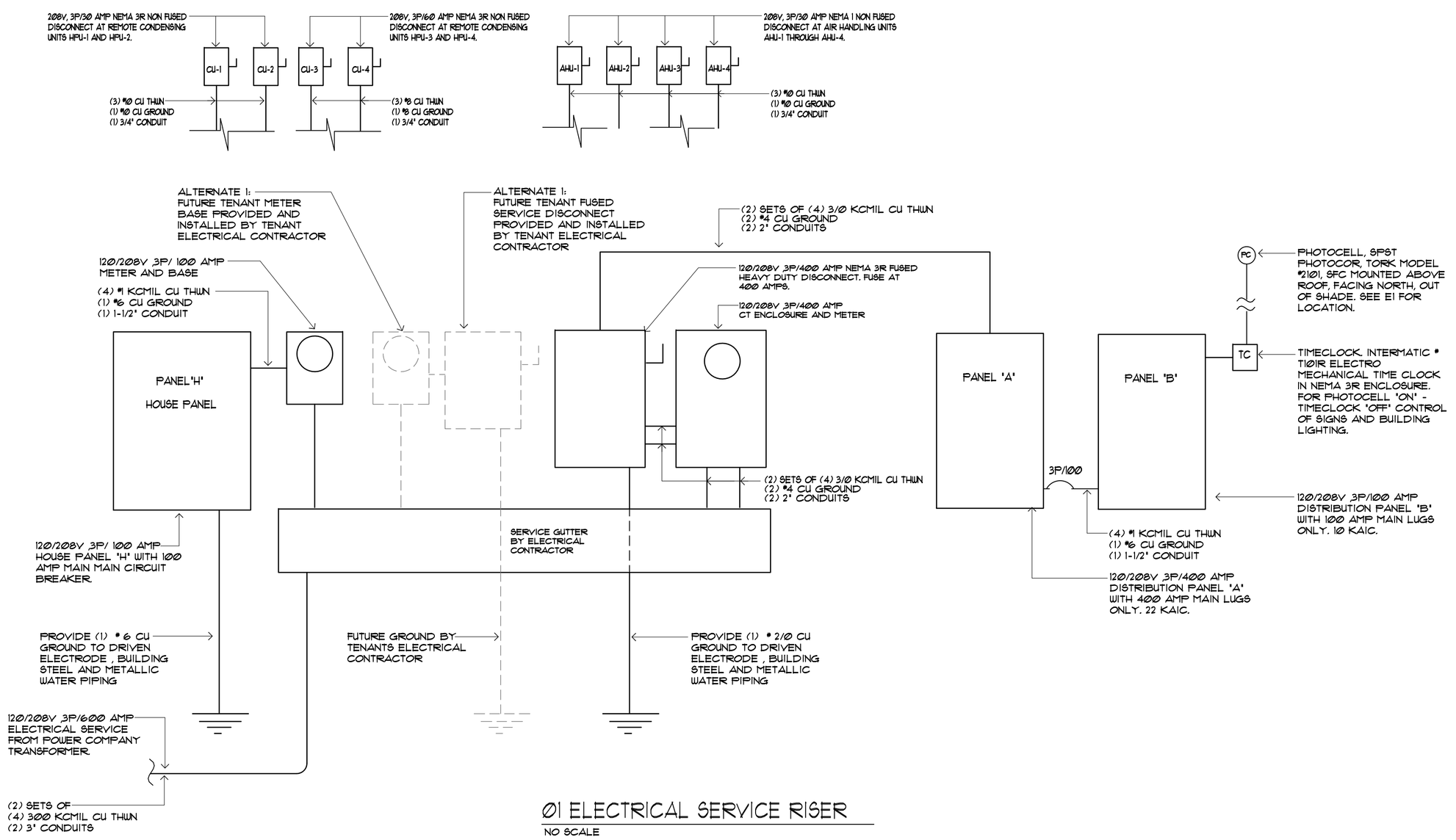
PANEL "H" SCHEDULE

120/208V, 3P/100 AMP 12 SPACE
SURFACE PANEL W/100 AMP MAIN CIRCUIT BREAKER

NOTES:	DESCRIPTION	POLE	TRIP AMPS	TOTAL WATTS	ABC		TOTAL WATTS	TRIP AMPS	POLE	DESCRIPTION	NOTES:
	EXTERIOR RECEPTACLES	1	20	1440	1	2	900	20	1	EXTERIOR BLDG LIGHTS	3
	EXIT/EMERG. / CONTACTOR	1	20	340	3	4	900	20	1	EXTERIOR BLDG LIGHTS	3
	SPRINKLER RM HEAT (1)	1	20	1500	5	6	800	20	1	EXTERIOR BLDG LIGHTS	3
	SPARE	1	20		7	8	180	20	1	SPRINKLER ALARM	
	SPARE	1	20		9	10	1200	20	1	SIGNAGE	3
	SPARE	1	20		11	12	1000	20	1	SITE LIGHTING	3

TOTAL 'A' 2520
TOTAL 'B' 2440
TOTAL 'C' 3300
PANEL TOTAL: 8260W x125%=10325 WATTS (29 AMPS)

1. PROVIDE LOCK ON BREAKER
2. PROVIDE HACR TYPE CIRCUIT BREAKER
3. CIRCUIT THROUGH TIME CLOCK.



01 ELECTRICAL SERVICE RISER

NO SCALE

FOR BIDDING PURPOSES ONLY

NO.	DATE	REVISIONS	BY
1	04-30-09	OWNER REVISIONS	

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECTS OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK
DO NOT SCALE DRAWINGS

ARCHITECT: Philip Kemery

DATE: 04-30-09

NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

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COOK CHILDREN'S
PRIMARY CARE CLINIC
BURLESON, TX

JOB NUMBER
09.016

SHEET TITLE
ELECTRICAL DETAILS

SHEET NUMBER
E3 (1)

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MARCH 16, 2009